Federal Communications Commission
Washington, D.C. 20554

DA 13-1461

June 28, 2013

Mr. Zuhair Muakkit
Antenna Technology Communications, Inc.
450 North McKemy Avenue
Chandler, AZ 85226-2606

Call Sign: E010255
File No.: SES-MOD-20130117-00082

Dear Mr. Muakkit:

On January 17, 2013, Antenna Technology Communications, Inc. (Antenna Technology) filed the above-captioned application to modify its current fixed earth station authorization to replace a 7.6- meter antenna with a 2.4-meter antenna, as well as to add operations in the 5850-5925 MHz (Earth-to-space) frequency band to communicate with "ALSAT" as the point of communication. For the reasons discussed below, we dismiss the application as defective, without prejudice to re-filing.[1]

Section 25.112 of the Commission's rules,[2] requires the Commission to return, as unacceptable for filing, any earth station application that is not substantially complete, that contains internal inconsistencies, or that does not substantially comply with the Commission's rules. The deficiencies and inconsistencies in Antenna Technology's application are as follows:

- In item E18 of Schedule B of Form 312, Antenna Technology states that a frequency coordination report is not required for the emission designator 5G00G1F, which will operate in the 5850-6425 MHz frequency band. Antenna Technology's statement is incorrect. Section 25.130(b) of the Commission's rules requires a frequency coordination analysis to be provided as part of applications for earth stations transmitting in frequency bands shared with equal rights between terrestrial and space services.[3] Because the 5840-6425 MHz frequency band is shared with equal rights with terrestrial services, the failure to provide a frequency coordination analysis renders Antenna Technology's application incomplete.

- In item E21 of Schedule B to Form 312, Antenna Technology incorrectly lists "ALSAT" as the sole point of communication in the 5850-5925 MHz frequency band. An application for an earth station to communicate with ALSAT may be granted only in cases where the earth station is eligible for "routine processing." The criteria for routine processing of an earth station communicating in C-band frequencies are specified in Section 25.212(d) of the Commission's rules, 47 C.F.R. § 25.212(d). Notably, frequencies outside the 5925-6425 MHz (Earth-to-space) and 3700-4200 MHz (space-to-Earth) frequency bands are not authorized for routine licensing. Because only earth stations that meet routine licensing

[1] If Antenna Technology re-files an application in which the deficiencies identified in this letter have been corrected but otherwise identical to the one dismissed, it need not pay an application fee. *See* 47 C.F.R. § 1.1111(d).

[2] 47 C.F.R. § 25.112.

[3] 47 C.F.R. § 25.130(b).

criteria may be granted ALSAT as a point of communication, Antenna Technology's application is internally inconsistent and does not substantially comply with the Commission's rules.

- In item E49 of Schedule B to Form 312, Antenna Technology indicates that the Maximum EIRP Density per Carrier will be 25.80 dBW/4 kHz for emission carrier 5G00G1F. That value, however, is inconsistent with the value of -4.2 dBW/4 kHz, which is computed using the values Antenna Technology provides in response to items E48 (Maximum EIRP per Carrier (dBW)), E47 (Emission Designator), E38 (Total Input Power at antenna flange (Watts)), and E42 (Transmit Antenna Gain (dBi)).

- In item E59 of Schedule B to Form 312, Antenna Technology indicates that the western limit of the antenna elevation angle will be 42.8 degrees. This elevation angle is inconsistent with an antenna elevation angle of 41.6 degrees, which is calculated from the latitude and longitude that Antenna Technology provides in items E11 and E12.

Finally, pursuant to Section 25.132(a)(1) of the Commission's rules,[4] we request that Antenna Technology demonstrate compliance with the antenna performance standards of Sections 25.209(a) and (b) of the Commission's rules.[5] Although Antenna Technology indicates in item E15 that the 2.4-meter Prodelin GD Satcom model 1251 antenna complies with the antenna gain patterns that are specified in Section 25.209(a) and (b) of the Commission's rules, we request a demonstration of compliance in light of the inconsistencies in the technical information noted above and the small diameter of the requested antenna. If Antenna Technology cannot demonstrate compliance with Section 25.209(a) and (b), then Antenna Technology must either submit the certifications contained in Section 25.220(d)(1)(i-iv),[6] or cite the particular application file number and call sign of a license in which that type of non-routine antenna has been previously approved.[7] Please note that the Commission maintains a list of approved non-routine antenna at http://transition.fcc.gov/ib/sd/nresa/#.

Accordingly, pursuant to Section 25.112(a) (1) of the Commission's rules, 47 C.F.R. § 25.112(a)(1), and Section 0.261 of the Commission's rules on delegations of authority, 47 C.F.R. § 0.261, we dismiss Antenna Technology's application without prejudice to re-filing.

Sincerely,

Paul E. Blais
Chief, Systems Analysis Branch
Satellite Division
International Bureau

[4] 47 C.F.R. § 25.132(a)(1).

[5] 47 C.F.R. § 25.209(a) and (b).

[6] 47 C.F.R. § 25.220(d)(1)(i-iv).

[7] *2000 Biennial Regulatory Review – Streamlining and Other Revisions of Part 25 of the Commission's Rules Governing the Licensing of, and Spectrum Usage by, Satellite Network Earth Stations and Space Stations*, Fifth Report and Order, 20 FCC Rcd 5666, 5690-91 para. 59 (2005).